

IN THE CLAIMS

Please amend the status of the claims as indicated below:

Claims 1-10 (canceled)

11. (new) A radioactive dose dispensing apparatus for automatically filling a container with a required radioactive dose in a sterile environment, comprising:

means for radiation shielding of said radioactive dose dispensing apparatus;

means for controlling a mix of radioactive stock solution and dilution stock solution; and,

means for detecting radioactivity of said mix of radioactive stock solution and dilution stock solution.

12. (new) The radioactive dose dispensing apparatus according to Claim 11, wherein said container is plunger-operated disposable syringe.

13. (new) The radioactive dose dispensing apparatus according to Claim 12, further comprising a shielded receptacle for receiving plunger-operated disposable syringe.

14. (new) The radioactive dose dispensing apparatus according to Claim 12, further comprising drive means for actuating said plunger-operated disposable syringe.

15. (new) The radioactive dose dispensing apparatus according to Claim 14, wherein said drive means is a linear drive mechanism for actuating said plunger-operated

disposable syringe.

16. (new) The radioactive dose dispensing apparatus according to Claim 12, further comprising a programmable logic controller for automating said radioactive dose dispensing apparatus and calculating a required dose, said programmable logic controller operable in combination with a radiation detector for controlling the radioactive dose being dispensed into said plunger-operated disposable syringe.

17. (new) The radioactive dose dispensing apparatus according to Claim 16, wherein programmable logic controller is operable via a computer interface.

18. (new) The radioactive dose dispensing apparatus according Claim 11, further comprising a disposable tubing assembly for providing a sterile fluid pathway for the dilution stock solution.

19. (new) The radioactive dose dispensing apparatus according Claim 11, further comprising pinch valves for switching between the radioactive stock solution and the dilution stock solution.

20. (new) A method for automatically dispensing a dose of radioactive solution using a software-controlled lead shielded apparatus, comprising the steps of:

providing a radioactive stock solution for said software-controlled lead shielded apparatus;

providing a dilution stock solution for said software-controlled lead shielded apparatus; and,

controlling a dose of radioactive solution dispensed automatically into a syringe or vial via a computer software interface.